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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,916	02/04/2004	Ismat Ali Abu-Isa	DP-309400	3491

27305 7590 04/03/2007

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EXAMINER	
SANDERS, KRIELLION ANTIONETTE	
ART UNIT	**PAPER NUMBER**
1714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/771,916	ABU-ISA, ISMAT ALI	
	Examiner	Art Unit	
	Kriellion A. Sanders	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 2/26/07.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-3 and 5-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-3 and 5-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/07.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/24/2007 has been entered.

2.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3 and 5-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over PG Pub document number 20020155348 to Gitto.

3. Gitto discloses a plastic material for formulating a battery casing comprising:

a) a bottom portion having a bottom and side walls forming a compartment for holding a battery acid and battery plates; b) top portion for covering said compartment.

The bottom portion and top portion of the battery casing are formed of a flame retardant thermoplastic composition comprising a homopolymer, a copolymer and ammonium

polyphosphate, the battery casing has a burn rating of V-O under the UL-94 standard. The thermoplastic compositions may also include fillers, such as aluminum trihydrate, hydrated magnesium, or hydrated calcium silicate, can also be included in the composition. Other fillers that may be used include those commonly used in plastic compounding, such as clays, talcs, carbonates, carbon black, hydrates and oxides. Specifically the filler may be selected from the group consisting of aluminum trihydrate, hydrated magnesium, hydrated calcium silicate and calcium carbonate.

Antioxidants may also be used in the compositions and include tetrakismethylene (3,5-di-t-butyl-4-hydroxyphenyl) propionate (Irganox 1010 or equivalent) and/or octadecyl-3-(3',5'-di-t-butyl-4-hydroxyhydrocinnamate) methane (Irganox 1076 or equivalent); a blend of tetrakismethylene (3,5-di-t-butyl-4-hydroxyphenyl) propionate/tris (2,4-di-t-butyl-phenyl) phosphite/di-stearyl-3,3'-thio-dipropionate (Lowinox TB311); also thermal heat stabilizer (Thermchek 832) and metal deactivator (Irganox 1024).

The resultant compositions are said to exhibit low smoke, good flame retardant, mechanical and electrical properties, excellent processability, excellent heat seal properties, excellent weld impact properties, and minimal moisture absorption.

Gitto indicates that various techniques have been developed to impart flame retardancy or fire resistancy to plastics. Fire-resistant properties can be imparted to plastic materials by mixing polymer components with one or more fire retardants. Examples of fire retardants include halogenated compounds having a high content of halogen. Other examples include phosphorus

compounds, such as derivatives of phosphoric acid and polyphosphoric acid, and agents formed of metal derivatives, such as hydrated alumina, magnesium hydroxide, etc.

One embodiment of the patented composition is described as being a non-halogenated, low smoke, low corrosive, flame retardant composition with an overall performance that is superior to halogenated composition. Patentee indicates that the compositions of the patented invention may generally be utilized for a wide array of products and that the amount of the various components used therein may be varied to achieve an exact combination of physical, electrical and combustion properties for a particular application.

Gitto therefor documents that although the use of halogenated fire retardants is known in the art, halogenated fire retardants are not preferential.

Gitto also documents the use of hydrated alumina and suggests the use of polyolefins as the polymeric binder material.

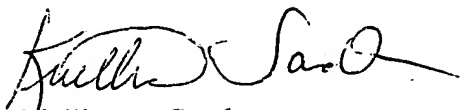
Gitto differs from thee present invention in the weight percentages of the components employed. Gitto does not teach specific weight percentages for all of the various components employed, but does suggest that each of the homopolymer and copolymer be used at 33-35% by weight (claims 6 and 7), and that the ammonium polyphosphate, which is a nitrogenous gas generating agent, be used at from 25-27% by weight of the composition, (claim 9). Therefor, determination of optimal weight percentages for the hydrated magnesium (water vapor generating agent), antioxidant, and fillers or reinforcing agents disclosed by Gitto would have been obvious to the ordinary practitioner of this art at the time of applicant's invention.

See claims 1-14, particularly 4, 6 and 9. Also see paragraphs 0022-0032.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kriellion A. Sanders
Primary Examiner
Art Unit 1714

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